SAFETY DATA SHEET

Date of issue/Date of revision

: 12 July 2023

: 23 Version

Europe

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name	: NOVAGUARD 260 HARDENER
Product code	: 00241814
Other means of identificat	ion
Not available.	

1.2 Relevant identified uses of the substance or mixture and uses advised against **Product use** : Professional applications, Used by spraying. Use of the substance/ : Coating. mixture **Uses advised against** : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL Tweemontstraat 104 B-2100 Deurne Belgium Telephone +32-33606311 Fax +32-33606435

e-mail address of person responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

Supplier

+31 20 4075210

SECTION 2: Hazards identification

2.1 Classification of th	e substance or mixture		
Product definition	: Mixture		
Classification accord	ing to Regulation (EC) N	<u>No. 1272/2008 [CLP/GHS]</u>	
Flam. Liq. 3, H226			
Skin Corr. 1C, H314			
Eye Dam. 1, H318			
Skin Sens. 1, H317			
Repr. 1B, H360F			
STOT SE 3, H335			
Asp. Tox. 1, H304			
Aquatic Chronic 2, H41	1		
The product is classifie	d as hazardous accordino	g to Regulation (EC) 1272/2008 as amended.	

Europe

Code	: 00241814	Date of issue/Date of revision	: 12 July 2023
NOVAGUAR	D 260 HARDENER		

SECTION 2: Hazards identification

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard picto

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May damage fertility. Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.
Response	: Collect spillage.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P273, P391, P403 + P233, P501
Hazardous ingredients	 xylene 2-methylpropan-1-ol 2,4,6-tris(dimethylaminomethyl)phenol N-(3-(trimethoxysilyl)propyl)ethylenediamine m-phenylenebis(methylamine) bisphenol A 3-aminopropyldimethylamine
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Restricted to professional users.
Special packaging requirem	nents
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.

2.3 Other hazards

Code : 00241814 NOVAGUARD 260 HARDENE	Date of issue/Date of revision : 12 July 2023 R
SECTION 2: Hazards	identification
Product meets the criteria for PBT or vPvB	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

May cause endocrine disruption.

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
enzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	ATE [Oral] = 1230 mg/ kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l	[1] [2]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
Formaldehyde, polymer with N,N-dimethyl- 1,3-propanediamine and phenol	CAS: 445498-00-0	≥5.0 - ≤8.8	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/ kg M [Acute] = 1 M [Chronic] = 1	[1]
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥5.0 - ≤10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≥1.0 - ≤6.4	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1200 mg/ kg ATE [Dermal] = 1280 mg/kg	[1]
N-(3-(trimethoxysilyl)propyl) ethylenediamine	EC: 217-164-6 CAS: 1760-24-3	≥1.0 - ≤5.0	Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT SE 3, H335	-	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
m-phenylenebis	REACH #:	≥1.0 - ≤3.3	Acute Tox. 4, H302	ATE [Oral] = 930 mg/	[1] [2]
English (US)			Europe		3/21

Code : 00241814 NOVAGUARD 260 HARDEN	ER	Date of	issue/Date of revision	: 12 July 2023	
SECTION 3: Compo	sition/informat	ion on i	ngredients		
(methylamine)	01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0		Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 EUH071	kg ATE [Inhalation (gases)] = 4500 ppm	
bisphenol A	REACH #: 01-2119457856-23 EC: 201-245-8 CAS: 80-05-7 Index: 604-030-00-0	≤1.6	Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 10	[1] [2] [3]
salicylic acid	REACH #: 01-2119486984-17 EC: 200-712-3 CAS: 69-72-7 Index: 607-732-00-5	≤1.2	Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d	ATE [Oral] = 891 mg/ kg	[1]
3-aminopropyldimethylamine	REACH #: 01-2119486842-27 EC: 203-680-9 CAS: 109-55-7 Index: 612-061-00-6	≤0.30	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 410 mg/ kg ATE [Dermal] = 1100 mg/kg	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Xylene: Several REACH registrations cover the REACH registered substance with xylene isomers, ethylbenzene (and toluene). The other REACH Registrations include: 01-2119555267-33 reaction mass of ethylbenzene and m-xylene and pxylene, 01-2119486136-34 Aromatic hydrocarbons, C8, 01-2119539452-40 reaction mass of ethylbenzene and xylene. Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

Ingestion :	person warm and at rest. Do NOT induce vomiting.
The second second	If swallowed, seek medical advice immediately and show this container or label. Keep
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Code : 00241814 NOVAGUARD 260 HARDENEF	Date of issue/Date of revision : 12 July 2023		
SECTION 4: First aid	measures		
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.		
4.2 Most important symptoms	and effects, both acute and delayed		
Potential acute health effects	<u>8</u>		
Eye contact	: Causes serious eye damage.		
Inhalation	: May cause respiratory irritation.		
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.		
Ingestion	: May be fatal if swallowed and enters airways.		
Over-exposure signs/sympto	oms		
Eye contact	: Adverse symptoms may include the following: pain watering redness		
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations		
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations		
Ingestion	: Adverse symptoms may include the following: stomach pains nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations		
4.3 Indication of any immedia	te medical attention and special treatment needed		
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.		
Specific treatments	: No specific treatment.		
SECTION 5: Firefight	ng measures		
5.1 Extinguishing media			
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.		
Unsuitable extinguishing media	: Do not use water jet.		

Code	: 00241814	Date of issue/Date of revision	: 12 July 2023
NOVAGUARI	D 260 HARDENER		

SECTION 5: Firefighting measures

5.2 Special hazards arising fr	om the substance or mixture
 Hazards from the substance or mixture Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazar fire or if heated, a pressure increase will occur and the container may burst, with of a subsequent explosion. This material is toxic to aquatic life with long lasting Fire water contaminated with this material must be contained and prevented from discharged to any waterway, sewer or drain. 	
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides Formaldehyde.
5.3 Advice for firefighters	
Special precautions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	tective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
6.3 Methods and materials for	r containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

English (US)	Europe	6/21
--------------	--------	------

Code : 00241814 NOVAGUARD 260 HARDENER	Date of issue/Date of revision	: 12 July 2023		

SECTION 6: Accidental release measures

6.4 Reference to other	: See Section 1 for emergency contact information.
sections	See Section 8 for information on appropriate personal protective equipment.
	See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
7.2 Conditions for safe storage, including any incompatibilities	: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Code : 00241814 NOVAGUARD 260 HARDENER Date of issue/Date of revision

: 12 July 2023

NOVAGUARD 260 HARDENER

SECTION 8: Exposure controls/personal protection

Product/ingredient name	e Exposure limit values
penzyl alcohol	IPEL (-).
	TWA: 5 ppm
	STEL: 10 ppm
xylene	EU OEL (Europe, 1/2022). [xylene, mixed isomers pure]
	Absorbed through skin.
	STEL: 442 mg/m ³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 221 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
2-methylpropan-1-ol	ACGIH TLV (United States, 1/2022).
	TWA: 152 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.
ethylbenzene	EU OEL (Europe, 1/2022). Absorbed through skin.
	STEL: 884 mg/m ³ 15 minutes.
	STEL: 200 ppm 15 minutes.
	TWA: 442 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
m-phenylenebis(methylamine)	ACGIH TLV (United States, 1/2022). Absorbed through skin.
	C: 0.018 ppm
bisphenol A	EU OEL (Europe, 1/2022).
	TWA: 2 mg/m ³ 8 hours. Form: Inhalable fraction
Recommended monitoring : 🕅	erence should be made to monitoring standards, such as the following: European
	ndard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure
	nhalation to chemical agents for comparison with limit values and measurement
stra	tegy) European Standard EN 14042 (Workplace atmospheres - Guide for the
	lication and use of procedures for the assessment of exposure to chemical and
	ogical agents) European Standard EN 482 (Workplace atmospheres - General
requ	uirements for the performance of procedures for the measurement of chemical

DNELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
benzyl alcohol	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
-	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5.4 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	22 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	27 mg/m ³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	110 mg/m ³	Workers	Systemic
xylene	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Systemic
	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Local
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Local
English (US)		·	Europe	-	8/21

of hazardous substances will also be required.

agents) Reference to national guidance documents for methods for the determination

Code : 00241814 NOVAGUARD 260 HARDENER Date of issue/Date of revision

: 12 July 2023

ECTION 8: Exposure	cont	rols/personal pro	tection		
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	221 mg/m³	Workers	Local
	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m³	General population	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m³	Workers	Systemic
2-methylpropan-1-ol	DNEL	Long term Inhalation	55 mg/m³	General population	Local
	DNEL	Long term Inhalation	310 mg/m³	Workers	Local
2,4,6-tris	DNEL	Long term Oral	0.075 mg/kg bw/day	General population	Systemic
(dimethylaminomethyl)phenol					
	DNEL	Short term Dermal	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.13 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	0.13 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	0.15 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.53 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	0.6 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	2.1 mg/m ³	Workers	Systemic
N-(3-(trimethoxysilyl)propyl) ethylenediamine	DNEL	Long term Inhalation	0.1 mg/m³	General population	Local
	DNEL	Long term Inhalation	0.6 mg/m³	Workers	Local
	DNEL	Short term Inhalation	4 mg/m³	General population	Local
	DNEL	Short term Inhalation	5.36 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	50 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	50 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	260 mg/m³	Workers	Systemic
ethylbenzene	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	15 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m ³	Workers	Local
	DMEL	Long term Inhalation	442 mg/m³	Workers	Local
	DMEL	Short term Inhalation	884 mg/m ³	Workers	Systemic
m-phenylenebis(methylamine)	DNEL	Long term Inhalation	0.2 mg/m ³	Workers	Local
	DNEL	Long term Dermal	0.33 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.2 mg/m³	Workers	Systemic
bisphenol A	DNEL	Long term Inhalation	2 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	2 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	2 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	2 mg/m ³	Workers	Local
	DNEL	Long term Dermal	0.031 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	0.031 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	1 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	1 mg/m ³	General population	Local
	DNEL	Short term Inhalation	1 mg/m ³	General population	
	DNEL	Long term Dermal	0.002 mg/kg bw/day	General population	
	DNEL	Short term Dermal	0.002 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.004 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.004 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.0019 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.0019 mg/kg bw/day	General population	Systemic
English (US)	·	·	Europe		9/21

Code : 00241814 NOVAGUARD 260 HARDENER Date of issue/Date of revision

: 12 July 2023

		• •			
	DNEL	Short term Oral	0.004 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.004 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.031 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0.031 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	1 mg/m ³	General population	Local
	DNEL	Long term Inhalation	1 mg/m ³	General population	Local
	DNEL	Short term Inhalation	1 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	2 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	2 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	2 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	2 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	1 mg/m³	General population	Systemic
salicylic acid	DNEL	Long term Oral	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.3 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	4 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
3-aminopropyldimethylamine	DNEL	Long term Inhalation	1.2 mg/m³	Workers	Systemic

PNECs

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
x ylene	-	Fresh water	0.327 mg/l	-
	-	Marine water	0.327 mg/l	-
	-	Sewage Treatment Plant	6.58 mg/l	-
	-	Fresh water sediment	12.46 mg/kg dwt	-
	-	Marine water sediment	12.46 mg/kg dwt	-
	-	Soil	2.31 mg/kg	-
2-methylpropan-1-ol	-	Fresh water	0.4 mg/l	Assessment Factors
	-	Marine water	0.04 mg/l	Assessment Factors
	-	Sewage Treatment Plant	10 mg/l	Assessment Factors
	-	Fresh water sediment	1.56 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	0.156 mg/kg dwt	-
	-	Soil	0.076 mg/kg dwt	Equilibrium Partitioning
ethylbenzene	-	Fresh water	0.1 mg/l	Assessment Factors
	-	Marine water	0.01 mg/l	Assessment Factors
	-	Sewage Treatment Plant	9.6 mg/l	Assessment Factors
	-	Fresh water sediment	13.7 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	1.37 mg/kg dwt	Equilibrium Partitioning
	-	Soil	2.68 mg/kg dwt	Equilibrium Partitioning
	-	Secondary Poisoning	20 mg/kg	-
bisphenol A	-	Fresh water	0.018 mg/l	Sensitivity Distribution
	-	Marine water	0.018 mg/l	Sensitivity Distribution
	-	Sewage Treatment Plant	320 mg/l	Assessment Factors
	-	Fresh water sediment	1.2 mg/kg dwt	Assessment Factors
	-	Marine water sediment	0.24 mg/kg dwt	Assessment Factors
	-	Soil	3.7 mg/kg dwt	Assessment Factors
3-aminopropyldimethylamine	-	Fresh water	0.034 mg/l	Assessment Factors
	-	Marine water	0.003 mg/l	Assessment Factors
	-	Sewage Treatment Plant	69.5 mg/l	Assessment Factors
	-	Fresh water sediment	0.221 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	0.022 mg/kg dwt	Equilibrium Partitioning
	-	Soil	0.024 mg/kg dwt	Equilibrium Partitioning

8.2 Exposure controls

nglish (US)	Europe	10/21
	nglish (US)	nglish (US) Europe

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU)	
2020/878	

2020/878		Date of issue/Date of revision + 12 July 2022
Code : 00241814 NOVAGUARD 260 HARDENER	2	Date of issue/Date of revision : 12 July 2023
SECTION 8: Exposure	e c	controls/personal protection
Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Individual protection measu	<u>res</u>	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	1	Chemical splash goggles and face shield. Use eye protection according to EN 166.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Gloves	:	nitrile neoprene
Body protection		Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapor (Type A) and particulate filter P3
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Code	: 00241814	Date of issue/Date of revision	: 12 July 2023
NOVAGUARI	D 260 HARDENER		

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

 Information on basic physica <u>Appearance</u> 								
Physical state	: Liquid.							
Color	: Not available.							
Odor	: Amine-like. [Strong]							
Odor threshold	: Not available.							
Melting point/freezing point	May start to solidify at the following temperature: 14°C (57.2°F) This is based on data for the following ingredient: m-phenylenebis(methylamine). Weighted average -52.61°C (-62.7°F)							
Initial boiling point and boiling range	: >37.78°C							
Flammability	: Not available.							
Upper/lower flammability or explosive limits	: Greatest known ran	ge: Lower:	1.3% l	Upper: ´	13% (be	enzyl alc	ohol)	
Flash point	: Closed cup: 28°C							
Auto-ignition temperature	:							
- ·	Ingredient name		°C		°F		Method	
	2,4,6-tris(dimethylamino	methyl)phenc	ol 382		719.6	E	U A.15	
							(222)	tion 7)
Decomposition temperature	: Stable under recom		•	inu nano	uing co	onations	(see Sec	uon <i>r</i>).
рН	: Not applicable. inso	iupie in wa	ler.					
	1/(1000)	11						
	: Kinematic (40°C): <	14 mm²/s						
Solubility(ies)	:	14 mm²/s						
Solubility(ies) Media	: Result	14 mm²/s						
Solubility(ies)	:	14 mm²/s						
Solubility(ies) Media cold water Partition coefficient: n-octanol/	: Result Not soluble	14 mm²/s						
Solubility(ies) Media cold water Partition coefficient: n-octanol/water	: Result Not soluble	14 mm²/s						
Solubility(ies) Media cold water Partition coefficient: n-octanol/water	: Result Not soluble		· Pressi	ure at 2	0°C	Var	oor press	ure at 50°C
Solubility(ies) Media cold water Partition coefficient: n-octanol/water	: Result Not soluble			ure at 2 Meth		Var mm Hg	oor press kPa	ure at 50°C Method
Solubility(ies) Media cold water Partition coefficient: n-octanol/water	: Result Not soluble Not applicable.	Vapor		1	nod N	mm		
Solubility(ies) Media cold water Partition coefficient: n-octanol/ water Vapor pressure	: Result Not soluble Not applicable. Ingredient name	Vapor mm Hg <12	kPa <1.6	Meth DIN EN 13016-	od N -2	mm Hg	kPa	Method
Solubility(ies) Media cold water Partition coefficient: n-octanol/ water Vapor pressure Evaporation rate		Vapor mm Hg <12	kPa <1.6	Meth DIN EN 13016-	od N -2	mm Hg	kPa	Method
Solubility(ies) Media cold water Partition coefficient: n-octanol/water Vapor pressure Evaporation rate Relative density	: Result Not soluble Not applicable. Ingredient name 2-methylpropan-1-ol Highest known valu butyl acetate	Vapor mm Hg <12 e: 0.84 (eth	kPa <1.6 nylbenze	Meth DIN EN 13016- ene) W	N -2 reightec	mm Hg	kPa e: 0.42co	Method mpared with
Solubility(ies) Media cold water Partition coefficient: n-octanol/water Vapor pressure Evaporation rate Relative density Vapor density	Result Not soluble Not applicable. Ingredient name 2-methylpropan-1-ol Highest known value butyl acetate 1 Highest known value 1) The product itself is vapor or dust with a	Vapor mm Hg <12 e: 0.84 (eth e: 3.7 (Air not explos ir is possib	kPa <1.6 mylbenze = 1) (be sive, but le.	Meth DIN EN 13016 ene) W enzyl al	v 2 'eightec cohol). mation	mm Hg d averag Weight	kPa e: 0.42co	Method mpared with ge: 3.55 (Ai
Solubility(ies) Media cold water Partition coefficient: n-octanol/water Vapor pressure Evaporation rate Relative density Vapor density Explosive properties	Result Not soluble Not applicable. Ingredient name 2-methylpropan-1-ol Highest known valu butyl acetate 1 Highest known valu 1) The product itself is	Vapor mm Hg <12 e: 0.84 (eth e: 3.7 (Air not explos ir is possib	kPa <1.6 mylbenze = 1) (be sive, but le.	Meth DIN EN 13016 ene) W enzyl al	v 2 'eightec cohol). mation	mm Hg d averag Weight	kPa e: 0.42co	Method mpared with ge: 3.55 (Ai
Solubility(ies) Media cold water Partition coefficient: n-octanol/water Vapor pressure Evaporation rate Relative density Vapor density Explosive properties Oxidizing properties	Result Not soluble Not applicable. Ingredient name 2-methylpropan-1-ol Highest known value butyl acetate 1 Highest known value 1) The product itself is vapor or dust with a	Vapor mm Hg <12 e: 0.84 (eth e: 3.7 (Air not explos ir is possib	kPa <1.6 mylbenze = 1) (be sive, but le.	Meth DIN EN 13016 ene) W enzyl al	v 2 'eightec cohol). mation	mm Hg d averag Weight	kPa e: 0.42co	Method mpared with ge: 3.55 (Ai
	Result Not soluble Not applicable. Ingredient name 2-methylpropan-1-ol Highest known value butyl acetate 1 Highest known value 1) The product itself is vapor or dust with a	Vapor mm Hg <12 e: 0.84 (eth e: 3.7 (Air not explos ir is possib	kPa <1.6 mylbenze = 1) (be sive, but le.	Meth DIN EN 13016 ene) W enzyl al	v 2 'eightec cohol). mation	mm Hg d averag Weight	kPa e: 0.42co	Method mpared with ge: 3.55 (Ai

English (US)

 Code
 <th:00241814</th>
 Date of issue/Date of revision

: 12 July 2023

NOVAGUARD 260 HARDENER

IZ JUIY

SECTION 9: Physical and chemical properties

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
10.5 Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides Formaldehyde. metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
penzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m ³	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	_
	LD50 Oral	Rat	1.23 g/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Dermal	Rabbit	1.28 g/kg	-
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
N-(3-(trimethoxysilyl)propyl)	LD50 Dermal	Rabbit	>2000 mg/kg	-
ethylenediamine				
	LD50 Oral	Rat	2413 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
m-phenylenebis(methylamine)	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rat - Male,	>3100 mg/kg	-
		Female		
	LD50 Oral	Rat	930 mg/kg	-
bisphenol A	LD50 Dermal	Rabbit	3600 mg/kg	-
-	LD50 Oral	Rat	3.25 g/kg	-
salicylic acid	LD50 Oral	Rat	0.891 g/kg	-
3-aminopropyldimethylamine	LD50 Dermal	Rabbit	>1000 mg/kg	-
	LD50 Oral	Rat	410 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

English (US)	Europe	13/21
0 ()	•	

Code : 00241814 NOVAGUARD 260 HARDENER Date of issue/Date of revision

: 12 July 2023

SECTION 11: Toxicological information

Product/ingredient name		sult Species		es Score	Exposure	Observation
xylene 2,4,6-tris(dimethylaminomethyl)ph m-phenylenebis(methylamine)	enol Skin - Visible	Skin - Moderate irritant Skin - Visible necrosis Skin - Severe irritant			24 hours 500 mg 4 hours 4 hours	- 7 days 4 hours
Conclusion/Summary	·				·	
Skin : Th	nere are no data availa	able on the r	nixture its	elf.		
Eyes : Th	nere are no data availa	able on the r	nixture its	elf.		
Respiratory : Th	nere are no data availa	able on the r	nixture its	elf.		
Sensitization						
Product/ingredient n	ame	Route exposi		Speci	es R	esult
m-phenylenebis(methylamine)		skin	М	louse	Sensitizi	ng
Respiratory : T Mutagenicity Conclusion/Summary : T Carcinogenicity Conclusion/Summary : T Reproductive toxicity Conclusion/Summary : T Reproductive toxicity Conclusion/Summary : T Feratogenicity Conclusion/Summary : T Specific target organ toxicity (sintegeneric)		lable on the lable on the lable on the lable on the	mixture its mixture its mixture its mixture its	self. self. self. self.		
Product/ingredier	nt name	Catego	ory	Route of exposure	-	organs
xylene 2-methylpropan-1-ol N-(3-(trimethoxysilyl)propyl)ethyler bisphenol A	nediamine	Category Category Category Category Category	/3 - /3 /3 -	-	Respiratory tra Respiratory tra Narcotic effec Respiratory tra Respiratory tra	act irritation ts act irritation
Specific target organ toxicity (re	peated exposure)	I	I		1	
Product/ingradion	t nome	Catooo		Pouto of	Torret	organe

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Product/ingredient name	Result	
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1	

Information on the likely : Not available.

routes of exposure

Potential acute health effects

English	(US)
J -	· /

Code : 00241814	Date of issue/Date of revision : 12 July 2023
NOVAGUARD 260 HARDENE	
SECTION 11: Toxico	logical information
Inhalation	: May cause respiratory irritation.
Ingestion	: May be fatal if swallowed and enters airways.
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Eye contact	: Causes serious eye damage.
Symptoms related to the pl	hysical, chemical and toxicological characteristics
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Eye contact	: Adverse symptoms may include the following: pain watering redness
Delayed and immediate effe	ects and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	S : Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	Not available.
Potential delayed effects Potential chronic health eff	
Potential chronic health eff Not available.	
Potential chronic health eff	f <u>ects</u>
Potential chronic health eff Not available. Conclusion/Summary	 fects Not available. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently
Potential chronic health eff Not available. Conclusion/Summary General	 fects Not available. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Potential chronic health eff Not available. Conclusion/Summary General Carcinogenicity	 fects Not available. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. No known significant effects or critical hazards.

Code : 00241814 NOVAGUARD 260 HARDENER Date of issue/Date of revision

: 12 July 2023

SECTION 11: Toxicological information

Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). Avoid contact with skin and clothing. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

May cause endocrine disruption.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
₽-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours
N-(3-(trimethoxysilyl)propyl)ethylenediamine	EC50 597 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
bisphenol A	Acute LC50 0.885 mg/l Fresh water	Crustaceans	48 hours
	Acute LC50 8.11 mg/l Fresh water	Daphnia - <i>Daphnia</i> <i>magna</i> - Neonate	48 hours
	Acute LC50 4.6 mg/l Fresh water	Fish	96 hours
	Chronic NOEC 0.000174 mg/ I Fresh water	Fish	5 months
salicylic acid	Acute EC50 1147.57 mg/l Fresh water	Daphnia - <i>Daphnia</i> <i>Iongispina</i> - Neonate	48 hours
	Chronic NOEC 5.6 mg/l Fresh water	Daphnia - <i>Daphnia</i> <i>magna</i> - Neonate	21 days
3-aminopropyldimethylamine	Acute LC50 122 mg/l	Fish	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene 3-aminopropyldimethylamine	- OECD 301D	79 % - Readily - 10 days 69 % - Readily - 20 days	-	-

Conclusion/Summary : There are no data available on the mixture itself.

English	(US)
---------	------

Code	: 00241814	Date of issue/Date of revision	: 12 July 2023
NOVAGUARI	D 260 HARDENER		

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
penzyl alcohol	-	-	Readily
xylene	-	-	Readily
ethylbenzene	-	-	Readily
bisphenol A	-	-	Readily
3-aminopropyldimethylamine	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential	
🖻 enzyl alcohol	0.87	-	Low	
xylene	3.12	7.4 to 18.5	Low	
2-methylpropan-1-ol	1	-	Low	
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	Low	
ethylbenzene	3.6	79.43	Low	
m-phenylenebis(methylamine)	0.18	2.69	Low	
bisphenol A	3.4	43.65	Low	
salicylic acid	2.21 to 2.26	-	Low	
3-aminopropyldimethylamine	-0.352	-	Low	

12.4 Mobility in soil	
Soil/water partition	: Not available.
coefficient (Koc)	
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

May cause endocrine disruption.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods	
Product	
Methods of disposal :	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste :	Yes.
European success a state with (

European waste catalogue (EWC)

Eng	lish	(US)
9		\- -/

Code	: 00241814	Date of issue/Date of revision	: 12 July 2023
NOVAGUAF	D 260 HARDENER		

SECTION 13: Disposal considerations

•		
Waste code	Waste designation	
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	
Packaging	· ·	
Methods of disposal	 The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 	
Type of packaging	European waste catalogue (EWC)	
Container	15 01 06 mixed packaging	
Special precautions	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways drains and sewers.	

14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN3469	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
14.3 Transport hazard class(es)	3 (8)	3 (8)	3 (8)	3 (8)
14.4 Packing group	III	III	III	Ш
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Formaldehyde, polymer with N,N- dimethyl- 1,3-propanediamine and phenol, bisphenol A)	Not applicable.

Additional information

ADR/RID	: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Tunnel code	: (D/E)
ADN	: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.

ŝ

Code	: 00241814	Date of issue/Date of revision	: 12 July 2023
NOVAGUARD 260 HARDENER			

14. Transport information

14.6 Special precautions for	Transport within user's premises: always transport in closed containers that are	
user	upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	

14.7 Maritime transport in : Not applicable. bulk according to IMO instruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Toxic to reproduction	4,4'-isopropylidenediphenol	Recommended	ED/01/2018	10/1/2019
Endocrine disrupting properties for human health	4,4'-isopropylidenediphenol	Recommended	ED/01/2018	10/1/2019
Endocrine disrupting properties for environment	4,4'-isopropylidenediphenol	Recommended	ED/01/2018	10/1/2019

Annex XVII - Restrictions : Restricted to professional users.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category	
P5c E2	
EZ	

15.2 Chemical Safety Assessment

: No Chemical Safety Assessment has been carried out.

Code: 00241814Date of issue/Date of revision: 12 July 2023	
--	--

NOVAGUARD 260 HARDENER

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.	
H226	Flammable liquid and vapor.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H312	Harmful in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H336	May cause drowsiness or dizziness.	
H360F	May damage fertility.	
H361d	Suspected of damaging the unborn child.	
H373	May cause damage to organs through prolonged or repeated	
	exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
EUH071	Corrosive to the respiratory tract.	
Full text of classifications [CLP/GHS]		
Acute Tox. 4	ACUTE TOXICITY - Category 4	
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1	
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1	
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2	

English (US)	Europe	20/21
Skin Sens. 1	SKIN SENSITIZATION - Category 1	
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2	
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C	
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B	
Repr. 2	TOXIC TO REPRODUCTION - Category 2	
Repr. 1B	TOXIC TO REPRODUCTION - Category 1B	
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3	
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2	
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category	2
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category	
Asp. Tox. 1	ASPIRATION HAZARD - Category 1	
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3	
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2	

Code : 00241814 NOVAGUARD 260 HARDENER		Date of issue/Date of revision : 12 July 2023		
SECTION 16: Other information				
Skin Sens. 1B STOT RE 2		SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2		
STOT SE 3		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3		
<u>History</u>				
Date of issue/ Date of revision	: 12 July 2023			
Date of previous issue	: 24 October 2022			
Prepared by	: EHS			
Version	: 23			

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.